WE CLAIM:

1. An applicator for delivering a bioactive composition, comprising:

a jet dispenser comprising an orifice for high-speed ejection of droplets from the dispenser, the jet dispenser further comprising a main body;

a replaceable fluid reservoir for holding and delivering the bioactive composition to the orifice for ejection therethrough, the replaceable fluid reservoir at least partially insertable through the body; and

a body orifice spacer positioned between the dispenser orifice and a target during ejection of the bioactive composition to the target.

2. The applicator according to claim 1 wherein the applicator is an inhaler.

3. The applicator according to claim 2 wherein the applicator is a pulmonary inhaler.

4. The applicator according to claim 1 wherein the jet dispenser is a piezoelectric droplet jet dispenser or a thermal droplet jet dispenser.

5. The applicator according to claim 1 wherein the spacer is external to the body.

6. The applicator according to claim 1 wherein the droplets of the bioactive composition are sized for respiratory inhalation.

7. The applicator according to claim 1 wherein the droplets of the bioactive composition are sized for delivery to bronchial airways.

8. The applicator according to claim 1, further comprising multiple replaceable fluid reservoirs.

9. The applicator according to claim 8 wherein the reservoirs hold and deliver two or more different bioactive compositions.

10. The applicator according to claim 1 wherein the spacer is a mouthpiece spacer or a nasal spacer.

11. The applicator according to claim 1 wherein the spacer is a tubular spacer.

12. The applicator according to claim 1 wherein the spacer is dimensioned for partial insertion into a nose or mouth of a human.

13. The applicator according to claim 1 wherein the spacer changes a delivery direction.

14. The applicator according to claim 13 wherein the spacer is curved.

15. The applicator according to claim 1, further comprising a programmable controller for controlling the jet dispenser.

16. The applicator according to claim 15 wherein the programmable controller is a microprocessor.

17. The applicator according to claim 15 wherein the controller is programmable from a remote computer in communication with the controller.

18. The applicator according to claim 15 wherein the controller is programmable from a keypad or touch screen mounted on an external surface of the body and in communication with the controller.

19. An applicator for delivering a bioactive composition comprising:

a jet dispenser comprising plural fluid ejection heads, each ejection head further comprising a dispenser orifice;

multiple containers for holding and delivering the bioactive composition to the orifices, each container operably coupled to each fluid ejection head by an independent conduit; and

a body orifice spacer positioned between the fluid ejection heads and a target during ejection of the bioactive composition to the target.

20. The applicator according to claim 19 wherein the applicator is an inhaler.

21. The applicator according to claim 19 wherein the multiple containers hold different bioactive compositions.

22. The applicator according to claim 19 wherein the jet dispenser is a piezoelectric droplet jet dispenser or a thermal droplet jet dispenser.

23. The applicator according to claim 19 wherein the spacer is a mouthpiece spacer or a nasal spacer.

24. The applicator according to claim 19 wherein the spacer is dimensioned for at least partial insertion into a nose or mouth of a human.

25. The applicator according to claim 19 wherein the spacer defines a delivery pathway substantially transverse to the applicator.

26. The applicator according to claim 19, further comprising a programmable controller for controlling the jet dispenser.

27. The applicator according to claim 26 wherein the programmable controller is a microprocessor.

28. The applicator according to claim 26 wherein the controller is programmable to sequentially deliver different bioactive compositions from different containers (50).

29. The applicator according to claim 26 wherein the controller is programmable to simultaneously deliver different bioactive compositions from different containers.

30. The applicator according to claim 26 wherein the controller is programmable to deliver bioactive compositions from the applicator in response to clinical or physical information.

31. An applicator for delivering a bioactive composition to a mucous membrane, comprising:

a main body;

a jet dispenser comprising an orifice through which droplets of a bioactive composition are ejected;

a container for holding and delivering the bioactive composition to the orifice for ejection therethrough; and

a spacer positioned between the dispenser orifice and the mucous membrane during ejection of the bioactive composition to the mucous membrane, wherein the spacer extends substantially transverse to the body.

32. The applicator according to claim 31 wherein the spacer is dimensioned for at least partial insertion into a nose or mouth of a human.

33. An applicator for delivering a bioactive composition, comprising:

a jet dispenser comprising an orifice through which droplets are ejected in an ejection direction at high speed;

a container for holding and delivering the bioactive composition to the orifice for ejection therethrough; and

a delivery device that changes a delivery pathway of the droplets from the ejection direction to a delivery direction.

34. The applicator according to claim 33 wherein the delivery direction is substantially transverse to the ejection direction.

35. The applicator according to claim 33 wherein the delivery device comprises a conduit.

36. The applicator according to claim 33 wherein the delivery device comprises an angled member.

37. An applicator for delivering a bioactive composition to a mucous membrane, comprising:

a jet dispenser comprising an orifice, the orifice capable of ejecting the bioactive composition therethrough;

a container for holding the bioactive composition and operably coupled to the dispenser;

a processor electrically connected to the jet dispenser and programmable to deliver selected dosages of the bioactive composition; and

an input slot for removable memory electrically connected to the processor.

38. The applicator according to claim 37, further comprising means for programming the processor.

39. The applicator according to claim 38 wherein the means for programming is a keypad or a touch screen.

40. The applicator according to claim 37, further comprising a display screen electrically connected to the processor.

41. The applicator according to claim 37 wherein the input slot is an input slot for a flash memory card.

42. The applicator according to claim 37, further comprising a spacer positioned between the dispenser orifice and the target during ejection of the bioactive composition to the mucous membrane.

43. A kit for administering a bioactive composition to a subject, comprising:

an applicator, comprising a jet dispenser comprising an orifice for high-speed ejection of droplets from the dispenser, a replaceable fluid reservoir for holding and delivering the bioactive composition to the orifice for ejection therethrough, and a separate body orifice spacer capable of being positioned between the dispenser orifice and the subject during ejection of the bioactive composition to the subject; and

a set of instructions for operating the applicator.

44. The kit according to claim 43, wherein the spacer is a tubular mouthpiece.

45. The kit according to claim 43, wherein the spacer connects to the applicator substantially transverse to the applicator.

46. The kit according to claim 43, further comprising an amount of a bioactive composition.

47. The kit according to claim 43, further comprising a programmable controller.

48. The kit according to claim 44 wherein the controller controls the ejection of the bioactive composition in response to information about a physiological condition of the subject.

49. A method for administering a bioactive composition to a subject, comprising:

providing a jet dispenser comprising a plurality of reservoirs of bioactive substances; wherein the reservoirs are cartridges capable of being removed and replaced through an opening in the dispenser;

dispensing one or more of the bioactive substances from the containers through the jet dispenser into a mouth or nose; and

removing one of the reservoirs.

50. A method for administering a bioactive composition to a subject, comprising:

applying to a body orifice of the subject a body orifice spacer of an applicator, the applicator comprising a main body, a jet dispenser, and a dispenser orifice through which droplets of the bioactive composition are ejected, the applicator further comprising a container for holding and delivering the bioactive composition, wherein the spacer extends substantially transverse to the main body; and

dispensing the bioactive composition from the dispenser toward the body orifice.

51. The method according to claim 50 wherein the body orifice is a mouth or nose of a human subject.

52. The method according to claim 50 wherein the subject is a human.

53. The method according to claim 50 wherein the applicator further comprises a programmable controller.

54. The method according to claim 53 wherein the controller is programmable from a remote computer in communication with the controller.

55. The method according to claim 54 wherein the controller is programmable from a keypad or a touch screen mounted on an external surface of the main body and in communication with the controller.

56. The method according to claim 50 wherein the droplets are sized for respiratory inhalation.

57. The method according to claim 50 wherein the droplets are sized for delivery to bronchial airways.